

IMPROVED PIR MOTION SENSOR

ABSTRACT OF THE DISCLOSURE

A passive infrared sensor uses two detectors having elements of different configurations such that each element outputs a respective frequency when an object moves in front of it. Based on the presence of two frequencies with similar peak and/or slope characteristics, a motion signal is output to, e.g., activate an alarm. In another embodiment the detectors have plural elements with the elements of one detector being wired in a dimension that is orthogonal to the dimension in which the elements of the other detector are wired. The signals from the detectors are combined to determine motion and size of object. The detector elements can also be configured differently from each other as in the first embodiment, and the polarities of signals can be used to determine direction of motion. In yet another embodiment the detectors can be of the same size but have optics of different focal lengths.